Determinants of the Financing Obstacles Faced by SMEs: An Empirical Study of Emerging Economies

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Abstract: *Small and medium sized enterprises (SMEs) play a crucial role in the economic development of emerging countries. The lack of access to finances is one of the important growth constraints the SMEs face. This study investigates the firm and country specific determinants of the financial constraint levels of SMEs in selected emerging Western Balkan economies. The main determinants of the financing obstacles examined in the sampled countries were: firm size, ownership type, and age, accounting information transparency, the depth of credit information indexes, the banking sector concentration, property registration costs; and per capita GDP. The findings confirm that firm size is a significant determinant of the financial constraint levels of SMEs in the selected economies. Moreover, we found that older firms are financially more constrained in the region. The possible economic implications of the positive association between firm age and financial constraint are discussed. Banking sector concentration level plays crucial role in the external financing of SMEs in developing countries. By closely examining the firm characteristics and country-level factors that determine the degree of the financing obstacles faced by SMEs, we observed that in developing economies overall institutional and financial problems are more important than firm-specific determinants.*

Keywords*: Financing obstacles, SME, emerging economies.*

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Introduction

Although the importance of small and medium-sized enterprises (SMEs) to the economic development of a country, particularly an emerging economy, is evident, obstacles to the growth of SMEs have been left unaddressed. Small, young firms have high job creation rates (Ayyagari, Demirguc-Kunt, and Maksimovic, 2014), and SMEs intensify competition, market diversification, and innovation (Beck, Demirguc-Kunt, and Levine, 2005); they fill the niche which larger firms prefer not to be involved in (Tambunan, 2008). However, the presence of a large number of small enterprises that can neither expand nor exit is a symptom of a weakly developed business environment; accordingly, in the literature, the differences between the impacts of the SME sector on economic development in advanced versus emerging economies are evidenced (Beck & Demirguc-Kunt, 2006). Thus, business environmental indicators – including institutional, infrastructural, financial, regulatory and administrative factors – mediate the role of the SME sector in the economic development of countries. In less developed economies, institutional and market imperfections prevent small firms from achieving their optimal size. Consequently, growth-binding problems demand accurate investigations and rational solutions.

Among other barriers, crime, political instability, and a lack of access to financing are obstacles that have a direct impact on firm growth, and lack of access to financing is the most robust problem for SMEs (Ayyagari, Demirgüç-Kunt, and Maksimovic, 2008). Better access to financing results in employment growth in micro, small, and medium enterprises (Ayyagari et al., 2016). In developing economies, the key growth-binding obstacles to entrepreneurship are a lack of access to finance, a lack of access to markets, and a scarcity of "soft" skills. Financial sources are needed on a regular basis to obtain skills and purchase new facilities (Delalic and Oruc, 2014) in order for firms to expand and reach their optimal size. The impact of financial and legal underdevelopment and of corruption levels on firm growth depend greatly on firm size (Beck, Demirguc-Kunt, & Maksimovic, 2005).

The structure of financial institutions and lending infrastructures have a significant effect on the availability of funds for SMEs and infrastructure that affects the equity market, and overall financial systems are heterogeneous among developed and developing countries (Berger and Udell, 2006). In developed countries, the financing decisions of SMEs are time- and industry-dependent, whereas in emerging economies, small firms are financially constrained due to the high costs of borrowing (Bartlett and Bukvič, 2001), to the strict collateral requirements of financial institutions, and to the inadequate collateral possession of small enterprises (Yaldız Hanedar, Broccardo, and Bazzana, 2014). Other factors that determine the external financing constraints of SMEs in developing countries are the high costs of registering property as collateral for loans (Ayyagari, Beck, and Demirguc-Kunt, 2007), governmental factors, and the personal connectedness of firm owners to bank officials (Ruziev and Midmore, 2015).

In this study, we identify factors that affect SMEs' perceptions of the extent to which they are financially constrained. Even though this topic has been investigated in single-country and cross-country studies, this paper will contribute to the literature in the following ways. We take advantage of the Business Environment and Enterprise Performance Survey (BEEPS), which provides firm-level data on a wide range of private sector-related issues and uses a standardized survey instrument across countries. This feature enables us to accurately operationalize the variables and analyze the financing barriers to SMEs in groups of countries with similar levels of economic development. Most of previous studies that have used the BEEPS database have undertaken analyses of the large number of developing countries. We argue that a study focusing on a regional case might arrive at different outcomes due to the differing economic backgrounds, development levels, and cultural differences among a group of developing countries. Although Hashi and Toçi (2010) and Musta (2017) studied the financing constraints of SMEs in Southeastern Europe, our research complements theirs in following ways. First, we focus only on non-European Union (non-EU) European emerging economies, namely, Albania, Bosnia and Herzegovina, Serbia, Montenegro, and Kosovo, countries that promise different outcomes, since the SMEs in these states may not have same opportunities as EU member states. Ordinarily, economies of the Balkan region are considered "late starters," and their economic performance is not as stable as that of other Central European countries (Coşkun and Ilgün, 2009). Second, our analysis is augmented with country-specific factors, whereas the previous two studies were limited to firm-level determinants and country dummies.

Primarily, a regression involving only firm-specific factors relating to the financing constraints of SMEs was run. Then, to control for country-level determinants, we ran separate regressions. The findings show that firm size is the most robust determinant of the financing constraint levels of SMEs. Furthermore, a high level of bank concentration has an adverse effect on the financial status SMEs in selected emerging economies. In contrast to the findings of previous cross-country studies on financing constraint issues, we found that older firms in the region were more financially constrained.

The rest of the paper is organized as follows. In the next section, the relevant literature is reviewed. Section 3 describes the sample, data collection, and data analysis. Sections 4 presents the findings, and section 5 concludes the discussion.

Literature Review

In the literature, it is evidenced that small firms are financially more constrained than their larger counterparts (Barth, Lin, and Yost, 2011; Beck, Demirguc-Kunt, and Maksimovic, 2005; Hashi and Krasniqi, 2011) and that financing obstacles are more growth binding for SMEs (Beck and Demirguc-Kunt, 2006) than for larger enterprises. The wealth creation capability of SMEs also depends on their access to finance and their implementation of socially profitable investments (Asikhia, 2016). Age, size and ownership structure have been found as a common firm-specific factors that determine the financing status of SMEs (Beck, Demirgüç-Kunt, Laeven, and Maksimovic, 2006). Institutional development (including information sharing and accounting reporting standards, contract enforcement), bank concentration and consolidation, and the economic development level of countries are the main country-specific determinants of the financial constraints of small firms (Barth et al., 2011).

There are several justifications for why small firms are more financially constrained than large ones. Primarily, due to the opaqueness of SMEs, the agency costs between the borrower and lender are high (Beck et al., 2006; Daskalakis, Jarvis, and Schizas, 2013), which leads lenders to charge high interest for credit. Moreover, owing to their scope of operations, SMEs apply for relatively small loans; as a result, in the case of the fixed transaction cost per loan appraisal, financing a project or ongoing operation by borrowing becomes unprofitable (Beck and Demirguc-Kunt, 2006). The size of an enterprise and the functioning financial system in which the firm operates are the most important factors that determine the firm's choice of financing (Kurbegovic, 2014). In addition, Fan and Wong (2002) found that firms with a concentrated ownership structure are opaque and less informative. In line with this notion, Hope, Thomas, and Vyas (2009) argue that enterprises owned by a controlling owner are associated with less information disclosure to outsiders. Since the operations of SMEs are run by personalized management structures, their less informative disposition leads to high information costs for creditors, and in turn, high costs of borrowing for firms. Therefore, they are financially more constrained and dependent on their internal cash flow.

Foreign-owned firms have easier access to external financing, because foreign parental ties induce a natural inclination toward lending to foreign firms (Barth et al., 2011). Moreover, due to their foreign ownership structure, foreign-owned enterprises may have access to international financial sources (Beck et al., 2006). Also, the lighter constraints of foreign-originated firms could be a result of their ability to access financial resources in their home countries and transfer them to host countries through foreign direct investment, or by way of their know-how and innovative technology transfers (Hashi and Toçi, 2010). Based on this reasoning, we would expect foreign-owned SMEs to be financially less constrained than their domestic counterparts.

The next most robust determinant of the financing constraints is firm age; as the number of its years in operation increases, an enterprise becomes less financially constrained (Beck et al., 2006; Afandi and Kermani, 2014). Kira (2013) supports the negative association between firm age and financial constraint levels, stating that younger firms face heavy financial problems due to the information asymmetry between lending and borrowing institutions and to the informational opaqueness of newly established firms. In the early years of operation, fierce information asymmetry and agency cost problems between banks and SMEs are encountered because of the limited time period during which lending institutions acquire information about the track records and success of enterprises (Cassar, 2004). Firms aged less than ten years are more financially constrained than mature firms (Kira, 2013).

It has been shown that SMEs, which record their transactions in accordance with international accounting standards and use external auditors, finance their fixed-asset growth and working capital through formal external sources. Barth et al. (2011) revealed that SMEs that use international accounting standards finance more of their assets and working capital through foreign-owned bank loans, whereas SMEs that use external auditors apply for domestic loans. These results verify the proposition that more transparent firms face fewer financial problems. Moreover, the capability of financial transparency to decrease the degree of financing constraints increases if the SME has a controlling shareholder, and this interaction effect is greater in less developed economies with weak institutional environments (Hope, Thomas, and Vyas, 2009).

The availability of external financing depends not only on individual firm characteristics, but also on systematic country-level factors (Beck, Demirgüç-Kunt, and Honohan, 2009). Information asymmetry, which is fierce in emerging economies, affects the access of SMEs to finance (Barth et al., 2011). Unfortunately, the transparency principle of corporate governance is ignored in corporate governance codes in transition economies (Nizaeva and Uyar, 2017). Efficient contract enforcement, well-functioning property registration systems, and effective credit rating systems are conditions of great significance for mitigating the negative impact of information asymmetry on the external financing of SMEs (Okura, 2007; Maurer, 2008). Especially SMEs in developing economies are more vulnerable to institutional underdevelopment, due to their information opaqueness (Beck and Demirguc-Kunt, 2006). Bank paperwork and bureaucracy, and collateral requirements do not affect the bank financing of large firms, whereas these factors, along with high interest rates and the need for special connections with banks are the main barriers to the ability of SMEs to secure loans (Beck, Demirguc-Kunt, and Maksimovic, 2005). Also, their ability to provide collateral is an essential determinant of their access to finance (Kira, 2013). In countries with developed economies, advanced financial systems, and less corruption, SMEs report low financing constraints (Beck, Demirguc-Kunt, and Maksimovic, 2005).

Commercial banks play a relevant role in providing external financing for SMEs (Carbó-Valverde, Rodríguez-Fernández, and Udell, 2009); while large firms can take advantage of financial markets, small firms depend more on financial intermediaries. In transition countries, where the stock market is not developed and contract enforceability is inefficient, the banking sector remains the main source of external financing for SMEs, and its major role in overall economic development is undeniable (Ilgün and Coşkun, 2009). In the current practices of developing economies, banking debt is commonly used as a source of firm financing (Kurbegovic, 2014). Unfortunately, weak market regulations in emerging markets lead to higher concentration in the banking sector. Greater market power allows banks to charge high interest rates, manipulate the supply of funds (Barth et al., 2011), and behave in very selective manner. A more developed banking sector provides more funds for SMEs and supplies loans for a longer period and at lower interest rates (Barth et al., 2011).

Data and Methodology

In emerging economies, the definitions of SMEs vary, regulations are inconsistent, and the availability of national and regional statistics is limited (Neufeld and Earle, 2014; Khalmurzaev, 2000). Even within one country, bodies such as national statistics committees, private commercial banks, and governmental agencies have their own definitions of micro-, small- and medium-sized enterprises (MSME) (Kushnir, 2006). Although the number of employees, total assets, annual turnover, and invested capital amount criteria are employed to classify SMEs, the number of employees is the most commonly used criterion. The definitions of an SME by national statistics committees and governmental authorities across selected developing countries vary greatly, ranging from its being a firm with up to 80 employees in Albania (Bitzenis and Nito, 2005) to one with up to 250 employees in most other economies. Most cross-country studies of SMEs, due to consistency of firm distribution across countries (Beck, Demirguc-Kunt, and Levine, 2005) and evaluation simplicity, have used the 250-employee standard (Ayyagari et al., 2007; Beck, Demirguc-Kunt, and Levine, 2005; Yaldız Hanedar et al., 2014). Following this precedent, in this study, SMEs are defined as enterprises with up to 250 full-time employees.

Growth constraining obstacles present a "problematic situation" when it comes to acquiring certain resources needed by firms to sustain current operations or undertake further expansion (Van Geenhuizen and Soetanto, 2009). Table 1 shows that access to financing, competition with the informal sector, tax rates, and political instability are the highly perceived obstacles for SMEs in the selected countries.

Table 1: Obstacles affecting the operation of SMEs in the selected countries

The obstacles faced by SMEs	Percentage of firms
Access to finance	16.03%
Practices of competitors in the informal sector	16.86%
Tax rates	10.18%
Political instability	15.69%
Physical infrastructure (Access to Electricity)	4.51%
Corruption	4.34%
Custom and trade regulations	4.34%
Tax administration	4.51%
Courts	3.51%
Other (land, licensing, workforce education, labor regulations, etc.)	20.03%

The table was constructed based on the responses of SME interviewees, who consisted of business owners, co-owners, accountants, and managers, to the question "Which of the following elements of the business environment, if any, currently represents the biggest obstacle faced by this establishment?" Roughly, 16% of the overall SMEs reported access to financing, the practices of competitors in the informal economy, and political instability as the greatest obstacles to their operations. Of the SMEs, 10.18% reported tax rates as the greatest obstacle.

In the literature, a "financially constrained firm" is defined as a firm that is financially constrained if an increase in the supply of internal funds leads to a growth in investment (Beck et al., 2006) but if, due to market imperfections, it is difficult to acquire external funds (Van Geenhuizen and Soetanto, 2009; Gerlach-Kristen, O'Connell, and O'Toole, 2015). In some studies in the finance literature, *financial constraint* is emerged as a feature of long term lending contracts (Clementi and Hopenhayn, 2006), and such that investment is regressed as function of cash flow, liquidity ratio, and other variables obtained from a firm's financial statement. An alternative approach takes a firm's perception of how constrained it is as the financing constraint variable. Following Barth et al. (2011), Beck et al. (2006), Hashi and Toçi (2010) and others, our dependent variable – financial constraint – takes a value ranging from zero ("no obstacle") to four ("very severe obstacles") for the firms' response to the question "Is access to finance, which includes availability and costs, interest rates, fees, and collateral requirements, an obstacle to the current operations of this establishment?"

Financing obstacles are a function of both firm-specific and country-specific determinants. In line with Barth et al. (2011) and Beck et al. (2006), we propose the following research model, to be estimated with ordered probit:

$$\begin{aligned} FinObstacle = {} & \beta_0 + \beta_1 Age + \beta_2 Size + \beta_3 Ownership + \beta_4 Transparency \\ & + \beta_4 BankConc + \beta_5 InfSharing + \beta_6 LnGDPperCapita \\ & + \beta_7 PropRegCost + \varepsilon_i \end{aligned}$$

Firm-level attributes include age, size, ownership structure, and transparency. *Age* is defined as the number of years a firm has been operating; *size* is logarithm of sales; *ownership* is the percentage of foreign ownership; and *transparency* takes a value of 1 if the firm used an external auditor in last fiscal year, and otherwise a 0. Bank concentration (*BankConc)* is based on the assets of the three largest banks as a share of the assets of all commercial banks. Information sharing (*InfSharing*) is an index measuring the rules affecting the scope, accessibility, and quality of credit information available through either public or private credit registries; it takes a value from 1 to 10, where a higher value indicates better level of information sharing in a country. Since the other variables take index, percentage values, and since they are small numbers to avoid a non-normality problem, following Beck et al. (2008) and others, the logarithmic form of GDP per capita for the corresponding countries was used. GDP per capita is a logarithm of the countries' per capita GDP in current U.S. dollars. The property registration cost (*PropRegCost*) is the cost of registering a property as a percentage of the whole property value, which includes all fees, taxes, duties, payment to notaries, registry fees, and other related payments required by law (Ayyagari et al., 2007).

Data

The firm-level data were obtained from the last round (2012-2014) of the Business Environment and Enterprise Performance Survey (BEEPS), which is a large-scale, firm-level survey generally covering developing countries, which was conducted in 1999, 2002, 2004-2005, 2009 and 2012-2014. The BEEPS is jointly undertaken by the European Bank for Reconstruction and Development (EBRD) and the World

Bank Group (WBG). It aims to evaluate the business environment and general obstacles faced by firms in emerging economies, including considerations relating to finance, infrastructure, judicial matters, regulation, administration, crime, and corruption. The survey sample was selected to reflect the size, ownership, age, and transparency of firms. Although in the literature a lot has been done on SME financing constraints, most of the studies have focused on single countries (Bitzenis and Nito, 2005; Krasniqi, 2007; Xheneti and Bartlett, 2012) or on the large number of developing countries (Beck et al., 2006; Wang, 2016). Due to regional, macroeconomic, cultural, and political differences, studies that examine the determinants of SME financing constraints in terms of groups of relatively similar countries may arrive at different outcomes than single-country studies or studies of large number of developing countries. Even though geographically the Western Balkan region includes Croatia, Albania, Bosnia and Herzegovina, Serbia, Montenegro, and Kosovo, given the differences in business opportunities and in the institutional, financial, and regulatory environments between EU-member and non-EU states, for the purposes of this paper we excluded Croatia from the sample.

The observation distribution for the firms in the selected countries is as follows; Albania – 331 firms (21.72 % of the sample), Bosnia and Herzegovina – 286 firms (18.77%), Kosovo – 176 firms (11.55 %), Macedonia – 333 firms (21.85%), Montenegro – 95 firms (6.23 %), and Serbia – 303 firms (19.88 %). Initially, the database contained 1,791 firms; after the elimination of large enterprises with more than 250 employees and firms with missing values, the final sample consists of 1,524 observations in total.

Data for the GDP per capita in current U.S. dollars, property registration costs, and depth of credit information sharing for all of the countries were acquired from the World Development Indicators Report (2014) and Doing Business (2014),. The data on bank concentration were drawn from Demirgüç-Kunt et al. (2016).

Findings and Discussions

Tables 2 and 3 show the summary statistics and correlations between selected variables, respectively. The average value reported for the financing obstacle index, which ranges from 0 to 4, is 1.24. The ages of the firms in the sample span 5 to 76 years. The sample includes both pure domestic firms and fully foreign-owned firms. The assets of the three largest banks in each country account for between 43% and 90% of the assets of all the commercial banks in the country.

Table 2: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
FinObstacle	1,515	1.236	1.304	0	4
Age	1,524	18.726	9.375	5	76
Size	1,524	6.869	1.047	3.625	10.255
Transparency	1,515	1.482	1.398	0	1
ForeignOwn~p	1,524	4.814	19.972	0	100
BankConcen~n	1,524	58.387	14.866	43.009	89.935
PropRegCost	1,524	4.911	3.531	0.3	11.1
InfoSharing	1,524	6.167	0.799	5	7
LnGDPperCapita	1,524	3.706	.0769	3.589	3.857

The correlation matrix table shows the correlations between the financing obstacles and both the firm- and country-level variables we are considering. A negative correlation between firm size and financing obstacles is evident, which means that as firms get larger, they face lower financing constraints. Similarly, the financing obstacle variable is negatively correlated with foreign ownership, property registration cost, information sharing, and GDP per capita; in other instances, the correlations are positive.

Table 3: Correlation Matrix

	1	2	3	4	5	6	7	8	9
FinObstacle	1								
Age	0.080	1							
Size	-0.135	0.029	1						
Transparency	0.022	0.000	-0.04	1					
ForeignOwn~p	-0.053	-0.029	0.15	-0.049	1				
BankConcen~n	0.169	-0.087	-0.35	0.077	-0.080	1			
PropRegCost	-0.224	-0.160	0.18	-0.053	0.042	-0.338	1		
InfoSharing	-0.010	-0.024	0.59	0.088	0.025	0.107	-0.261	1	
LnGDPperCapita	-0.071	0.117	0.295	0.0630	0.051	-0.478	-0.309	0.302	1

In the economies where bank consolidation is lower, the firms are likely to be larger. Also, firm size is likely to be larger in countries where information sharing is more efficient and GDP per capita is high. It is also worth noting that in relatively developed economies, where GDP per capita is comparatively high, the banking sector is less concentrated, and property registration costs are low.

The regression results in column 1 of Table 4 show the only firm-specific predictors of SME financing obstacles. They indicate that large firms report lower financing obstacles than their smaller counterparts. Due to their scope of operations, SMEs generally apply for small loan amounts. Accordingly, because of the fixed transaction costs charged by financial institutions, smaller firms face higher costs of borrowing. In addition, since the financial positions of SMEs are typically more opaque in regard to externals, information asymmetry makes creditors more reluctant to lend to small businesses, or they require more collateral. Consequently, because of the high cost of borrowing and their lack of collateralizable assets, SMEs mostly rely on internal informal sources of financing, and they are more likely to be refused and discouraged. Although size is a significant determinant of financing obstacles for SMEs in all economies, in developed countries it seems to be less important than in emerging states (Beck et al., 2006). Hence, it is worth noting that the overall financial and institutional infrastructures of developing countries adversely affect small firms' accessibility to external financing. For instance, the lack of common accounting standards prevents lenders from evaluating the credibility of firms, and more paperwork and bureaucratic loan application procedures on the part of banks, less efficient regulations, and general financial market imperfections increase the likelihood that firms will not apply for loans.

Table 4: Determinants of Financing Obstacles

FinObstacle	(1)	(2)	(3)	(4)	(5)	(6)
Size	-.108 (.032)***	-.078 (.034)**	-.153 (.0395)***	-.075 (.033)**	-.112 (.033)***	-.045 (.043)
Age	.0082 (.004)*	.009 (.005)***	.009 (.004)**	-.075 .004)	.008 (.004)**	.006 (.003)*
Transparency	.0214 (.027)	.0285 (.027)	.025 (.027)	.005 (.027)	.021 (.027)	.026 (.054)
ForeignOwnership	-.0026 (.002)*	-.003 (.002)	-.0023 (.002)	-.003 (.002)	-.003 (.002)	-.002 (.002)
BankConc		.00657 (.002)***				.001 (.004)
Infsharing			.097 (.051)*			-.009 (.056)
PropRegCost				-.056 (.0097)***		-.078 (.012)***
LnGDPperCapita					.165 (.452)	-1.77 (.544)***
Observations	1,515	1,515	1,515	1,515	1,485	1,485
Log likelihood	-1015.709	-1011.948	-1013.875	-999.224	-1015.643	-2080.148
Pseudo R^2	0.012	0.015	0.013	0.027	0.011	0.026

*Note: Standard errors are reported in parenthesis and *, **, *** indicate significance levels of 10 %, 5 %, and 1 %, respectively. Source: Authors' own work*

Firm age and ownership structure are weakly significant, at a 10% significance level. Unexpectedly, and in contrast to prevalent previous findings relating to transition economies, a significant positive relationship between financing obstacles and firm age was found, which means that as firms age, they become more financially constrained. However, in their paper on financing constraints in the emerging transition economies of Southeastern Europe (namely, Bosnia and Herzegovina, Albania, Bulgaria, Croatia, Macedonia, Romania, and Serbia), Hashi and Toçi (2010) also found that older firms are financially more constrained and that a large portion of their investment depends on internal funding. A factor that must be considered in interpreting the relation between age and financing constraints for the firms in this region is economic transformation. The financing behavior of the firms established before the dissolution of the communist economic system may differ significantly from that of recently founded firms or firms that have been operating in other developing countries. The reform of the banking sector in the region may serve as a possible explanation for this finding (Hashi & Toçi, 2010). As foreign banks enter the market and as domestic banks become more competitive with them, firms become more constrained, in the sense that all of the firms find themselves "new" to foreign banking standards and market economy conditions.

Foreign-originated firms are financially less constrained than their domestic counterparts. They have access to financial resources through their parent companies; accordingly, they do not rely heavily on domestic bank loans in developing countries. Their ability to access cheap, long-term external funding or to fund their investments through a parent company makes foreign-originated SMEs financially less constrained in comparison to their domestic counterparts.

The coefficients of the country-level variables are presented in the next columns (Columns 2 to 6). The data in column 2 show that a high level of bank concentration adversely affects firms' availability to access external financing. This finding can be explained as follows. In economies with less developed equity markets, financial intermediaries are the only source of external financing. Consequently, as some banks gain market power, they charge high interest rates and behave in a selective way. Moreover, large banks prefer not to become involved in small loan appraisals, due to the high information costs associated with the opaqueness of SMEs and the high transaction cost per loan appraisals.

Although information sharing is weakly significant, we argue that due to the absence of unified, effective accounting systems in transition economies, the asymmetrical information problems in developing countries cannot be solved. Therefore, establishing common accounting standards is an important step. Also, a negative association between property registration costs and the level of financial constraints was found. Registration costs are an economic outcome of the legal environment and an indicator of the institutional development of a country (Amin and Haidar, 2012). Due to information opaqueness of SMEs, weakly functioning of unified accounting information system and high bank consolidation in developing economies, presence of collateral is the most important condition in loan approvals by financial institutions. In addition to high cost of borrowing and bank paperwork bureaucracies, high cost of registering property as collateral leads small businesses to rely on internal or informal ways of financing. In transition economies, large share of business activities lay within informal or semiformal sectors, and informal sector enterprises are always small in term of both assets and employees (Djankov et al., 2003). Djankov et al., (2003) also argue that, in general, these enterprises are financed by informal sources such as personal savings, family or friends, moneylenders, and remittances from family members abroad, and they are short-lived. With easy access to informal sources, small firms prefer to survive in the informal sector and are not so willing to expand.

The results of the regression that included all of the independent variables included are given in column 6 of Table 4. Even though, as reported in column 5, GDP per capita alone as a macroeconomic indicator cannot significantly determine the financial constraint levels of SMEs, when we regressed it with the other variables, it showed as statistically significant. In addition to statistical significance, the finding has economic importance. It indicates that SMEs in countries with higher GDP per capita report lower financing obstacles. Financial development affects economic growth through the ability of firms to obtain external financing (Love, 2003). In countries with comparatively lower per capita GDP and more friction in their financial systems, financially constrained small firms postpone their expansion and have to pass over investment opportunities. As reported, when we regressed all of the variables together, country-specific variables were found to be significant, and age, as a firm-specific variable, showed weak significance. Thus, we can conclude that in selected developing countries, the financing obstacles of SMEs are influenced more by macroeconomic factors than firm-specific factors.

Conclusion

In this study, firm and country characteristics that predict the levels of financing constrains of SMEs in Western Balkan countries – namely Albania, Bosnia and Herzegovina, Serbia, Montenegro, and Kosovo – were investigated, using data from last round of the BEEPS. Separate regressions were utilized to identify firm-specific factors that determine SMEs' perceptions of the extent to which they are financially constrained, and to control for country-level determinants.

A key finding is that firm size is the most robust determinant of financing constraint levels, which means that compared to large firms, SMEs are more likely to be refused credit from financial institutions and to face more difficulties in accessing external funds. In opposition to the findings of previous cross-country studies of financing constrain issues, we found that older firms in the region are more financially constrained, which is supported by the findings of Hashi and Toçi (2010) in a study of Southeastern Europe. This can be attributed to reforms in the banking sector in the region. Since most of relatively older firms were previously state-owned, the entry of foreign banks and the establishment of high standards for credit, which are new to both recently privatized and newborn firms, may have financially constrained the older firms more. The hypothesis that foreign-owned firms are financially less constrained than their domestic counterparts was weakly significant. This could be because foreign-originated SMEs have access to resources on more preferable terms through their parent companies in their home countries.

High level of bank concentration adversely affects the financial status of SMEs in the selected emerging economies. Consolidation in the banking sector leads to a situation where market conditions are dictated by only a few banks. The banks with greater market power engage in selective lending practices, preferring to lend to larger, more financially transparent, foreign-owned firms. It can be concluded that the level of financial and institutional development of an economy is the most important country-specific determinant of the financing constraints of SMEs.

There is a room for efficient government policies directed at enhancing the access of SMEs to external financing. Enforcing accounting standards and establishing both government and private credit bureaus may help with some common problems related to information sharing, and national loan guarantee schemes and governmental subsidies may reduce the financial constraint levels of SMEs.

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